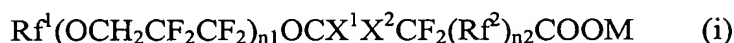


## AMENDMENTS TO THE CLAIMS

**This listing of claims will replace all prior versions and listings of claims in the application:**

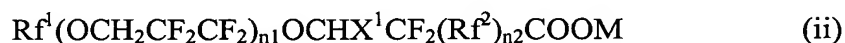
### LISTING OF CLAIMS:

1. (original): A fluoroalkylcarboxylic acid derivative which is represented by the general formula (i):



wherein  $\text{Rf}^1$  represents a straight or branched fluoroalkyl group containing 1 to 20 carbon atoms, which fluoroalkyl group may optionally contain 1 to 5 oxygen atoms in the principal chain thereof,  $\text{Rf}^2$  represents a straight or branched fluoroalkylene group containing 1 to 25 carbon atoms, said fluoroalkylene group may optionally contain 1 to 5 oxygen atoms in the principal chain thereof,  $n1$  represents an integer of 0 to 3,  $n2$  represents an integer of 0 or 1,  $\text{X}^1$  and  $\text{X}^2$  are the same or different and each represents hydrogen atom or fluorine atom, and  $\text{M}$  represents  $\text{NH}_4$  or a monovalent metal element.

2. (original): A fluoroalkylcarboxylic acid derivative which is represented by the general formula (ii):



wherein  $\text{Rf}^1$  represents a straight or branched fluoroalkyl group containing 1 to 20 carbon atoms, said fluoroalkyl group may optionally contain 1 to 5 oxygen atoms in the principal chain thereof,  $\text{Rf}^2$  represents a straight or branched fluoroalkylene group containing 1 to 25 carbon atoms, said

fluoroalkylene group may optionally contain 1 to 5 oxygen atoms in the principal chain thereof,  
n1 represents an integer of 0 to 3, n2 represents an integer of 0 or 1, X<sup>1</sup> represents hydrogen atom  
or fluorine atom, and M represents NH<sub>4</sub> or a monovalent metal element.

3. (currently amended): The fluoroalkylcarboxylic acid derivative according to Claim 1 ~~or 2~~,  
wherein Rf<sup>1</sup> is a straight or branched fluoroalkyl group containing 1 to 7 carbon atoms,  
said fluoroalkyl group may optionally contain 1 to 3 oxygen atoms in the principal chain thereof.

4. (original): The fluoroalkylcarboxylic acid derivative according to Claim 3,  
wherein Rf<sup>1</sup> is CF<sub>3</sub>-, CF<sub>3</sub>CF<sub>2</sub>-, CF<sub>3</sub>CF<sub>2</sub>CF<sub>2</sub>-, (CF<sub>3</sub>)<sub>2</sub>CF-, CF<sub>3</sub>CF<sub>2</sub>CF<sub>2</sub>CF<sub>2</sub>-,  
CF<sub>3</sub>CF<sub>2</sub>CF<sub>2</sub>OCF(CF<sub>3</sub>)CF<sub>2</sub>-, HCF<sub>2</sub>CF<sub>2</sub>CF<sub>2</sub>- or CF<sub>3</sub>OCF(CF<sub>3</sub>)CF<sub>2</sub>-.

5. (currently amended): The fluoroalkylcarboxylic acid derivative according to Claim 1, ~~2, 3 or~~  
~~4~~,  
wherein n1 is 0 (zero).

6. (currently amended): The fluoroalkylcarboxylic acid derivative according to Claim 1, ~~2, 3, 4~~  
~~or 5~~,  
wherein Rf<sup>2</sup> is -CF<sub>2</sub>OCF<sub>2</sub>-, -CF<sub>2</sub>(OCF(CF<sub>3</sub>)CF<sub>2</sub>)<sub>n3</sub>OCF(CF<sub>3</sub>)- (in which n3 represents an integer  
of 0 to 4) or -CF<sub>2</sub>(OCF(CF<sub>3</sub>)CF<sub>2</sub>)<sub>n4</sub>(CF<sub>2</sub>CF<sub>2</sub>)<sub>n5</sub>- (in which n4 represents an integer of 0 to 5 and  
n5 represents an integer of 0 to 5 provided that n4 and n5 satisfy the relation 3 x n4 + 2 x n5 ≤  
20).

7. (currently amended): The fluoroalkylcarboxylic acid derivative according to Claim 1, ~~2, 3, 4, 5~~  
~~or 6~~;

wherein  $n_2$  is 0 (zero).

8. (currently amended): A surfactant which comprises the fluoroalkylcarboxylic acid derivative  
according to Claim 1, ~~2, 3, 4, 5, 6 or 7~~.

9. (currently amended): A method of producing a fluoropolymer,  
wherein the fluoroalkylcarboxylic acid derivative according to Claim 1, ~~2, 3, 4, 5, 6, 7 or 8~~ is  
used as a surfactant in carrying out a polymerization in an aqueous medium.

10. (original): The method of producing the fluoropolymer according to Claim 9,  
wherein the fluoroalkylcarboxylic acid derivative is used in an amount of 0.0001 to 20% by mass  
relative to the aqueous medium.

11. (currently amended): A fluoropolymer aqueous dispersion,  
wherein a particle comprising a fluoropolymer is dispersed in an aqueous medium in the  
presence of the fluoroalkylcarboxylic acid derivative according to Claim 1, ~~2, 3, 4, 5, 6 or 7 or~~  
~~the surfactant according to Claim 8~~.

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12. (original): A fluoropolymer powder which is obtained by coagulating the fluoropolymer aqueous dispersion according to Claim 11.

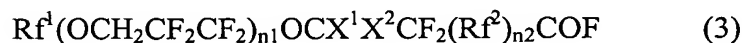
13. (original): A fluoropolymer aggregate obtained by coagulating the fluoropolymer aqueous dispersion according to Claim 11,

which is a polytetrafluoroethylene powder, a powder or a pellet each comprising a melt-processible resin, or a coagulation comprising an elastomeric polymer.

14. (original): A film/membrane which is obtained by coating, impregnation or cast film formation using the fluoropolymer aqueous dispersion according to Claim 11.

15. (currently amended): A molded article which is obtained by molding using the fluoropolymer powder according to Claim 12 ~~or the fluoropolymer aggregate according to Claim 13.~~

16. (currently amended): A method of producing a fluoroalkylcarboxylic acid derivative, which comprises producing the fluoroalkylcarboxylic acid derivative according to Claim 1, ~~2, 3, 4, 5, 6 or 7~~ by converting a fluorocarboxylic acid fluoride represented by the general formula (3):



wherein  $\text{Rf}^1$ ,  $\text{Rf}^2$ ,  $n1$ ,  $n2$ ,  $\text{X}^1$  and  $\text{X}^2$  are as defined hereinabove, to a fluorocarboxylic acid salt.

17. (original): The method of producing the fluoroalkylcarboxylic acid derivative according to Claim 16,

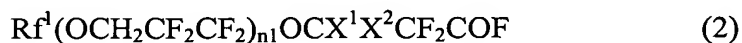
wherein the conversion of the fluorocarboxylic acid fluoride represented by the general formula (3) to the fluorocarboxylic acid salt is carried out by

- (A) a method comprising converting the terminal –COF group in said general formula (3) to –COOH by hydrolysis using an acid and converting the –COOH to –COOM by neutralization with an alkali,
- (B) a method comprising esterifying the terminal –COF group in said general formula (3) and, after separation of the ester, converting the ester moiety to –COOM by saponification, or
- (C) a method comprising esterifying the terminal –COF group in said general formula (3) and, after separation of the ester, converting the ester moiety to –COOM by saponification, then converting the latter to –COOH using an acid and then converting this to –COOM by neutralization with an alkali.

18. (currently amended): The method of producing the fluoroalkylcarboxylic acid derivative according to Claim 16 ~~or 17~~,

wherein the fluorocarboxylic acid fluoride represented by the general formula (3) is represented by said general formula (3) in which  $n_2$  is 1, and

said fluorocarboxylic acid fluoride represented by the general formula (3) is produced by reacting an intermediate fluorocarboxylic acid fluoride represented by the general formula (2):



wherein  $\text{Rf}^1$ ,  $n_1$ ,  $\text{X}^1$  and  $\text{X}^2$  are as defined above, with tetrafluoroethylene and iodine in an aprotic polar solvent to thereby convert the terminal –COF in said general formula (2) to -

$\text{CF}_2\text{OCF}_2\text{CF}_2\text{I}$ , followed by further conversion of the latter to  $-\text{CF}_2\text{OCF}_2\text{COF}$  by reaction with oleum, or

said fluorocarboxylic acid fluoride represented by the general formula (3) is produced by converting the terminal  $-\text{COF}$  in said general formula (2) to

$-\text{CF}_2(\text{OCF}(\text{CF}_3)\text{CF}_2)_p\text{OCF}(\text{CF}_3)\text{COF}$  [ $p$  being an integer of 0 to 5] by addition of hexafluoropropylene oxide, converting the terminal  $-\text{CF}(\text{CF}_3)\text{COF}$  to  $-\text{CF}(\text{CF}_3)\text{I}$  via  $-\text{CF}(\text{CF}_3)\text{COI}$  and converting  $-\text{CF}(\text{CF}_3)\text{I}$  to  $-\text{CF}(\text{CF}_3)(\text{CF}_2\text{CF}_2)_q\text{I}$  ( $q$  being an integer of 1 to 5), followed by further conversion to  $-\text{CF}(\text{CF}_3)(\text{CF}_2\text{CF}_2)_{q-1}\text{CF}_2\text{COF}$ .

19. (currently amended): The method of producing the fluoroalkylcarboxylic acid derivative according to Claim 16, ~~17 or 18~~,

wherein the intermediate fluorocarboxylic acid fluoride represented by the general formula (2) is a second intermediate represented by the general formula (2a):



wherein  $\text{Rf}^1$  and  $n1$  are as defined above, as obtained by monofluorinating a first intermediate represented by the general formula (1):



wherein  $\text{Rf}^1$  and  $n1$  are as defined above, or

a third intermediate represented by the general formula (2b):



wherein  $\text{Rf}^1$  and  $n1$  are as defined above, as obtained by difluorinating said first intermediate.

20. (currently amended): The method of producing the fluoroalkylcarboxylic acid derivative according to Claim 16, ~~17, 18 or 19~~, wherein  $Rf^1$  represents a straight or branched fluoroalkyl group containing 5 to 7 carbon atoms,  
said fluoroalkyl group may contain 1 to 5 oxygen atoms in the principal chain thereof.